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| FORM PTO-1449<br>(REV. 7-80)   | U.S. DEPARTMENT OF COMMERCE<br>PATENT AND TRADEMARK OFFICE | ATTY. DOCKET NO.<br>500966.01                   | APPLICATION NO.<br>09/994,516 |
| INFORMATION DISCLOSURE STATEMENT<br>(See Instructions, page 1, for filing requirements and instructions.)<br>(See Instructions, page 1, for filing requirements and instructions.) |  | APPLICANT(S)<br>Trung T. Doan and Dean A. Klein |                               |
|  |  | FILING DATE<br>November 26, 2001                | GROUP ART UNIT<br>2185        |

## U.S. PATENT DOCUMENTS

| *EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE     | NAME           | CLASS | SUBCLASS | FILING DATE<br>IF APPROPRIATE |
|----------------------|----|-----------------|----------|----------------|-------|----------|-------------------------------|
| TJC                  | AA | 5,818,844       | 10/06/98 | Singh et al.   | 370   | 463      |                               |
| TJC                  | AB | 6,272,609 B1    | 08/07/01 | Jeddeloh       | 711   | 169      |                               |
| TJC                  | AC | 6,477,592 B1    | 11/05/02 | Chen et al.    | 710   | 52       |                               |
| TJC                  | AD | 6,523,092 B1    | 02/18/03 | Fanning        | 711   | 134      |                               |
| TJC                  | AE | 6,523,093 B1    | 02/18/03 | Bogin et al.   | 711   | 137      |                               |
| TJC                  | AF | 6,622,227 B2    | 09/16/03 | Zumkehr et al. | 711   | 167      |                               |
| TJC                  | AG | 6,631,440 B2    | 10/07/03 | Jenne et al.   | 711   | 105      |                               |
| TJC                  | AH | 2002/0144064 A1 | 10/03/02 | Fanning        | 711   | 144      |                               |
| TJC                  | AI | 2003/0005223 A1 | 01/02/03 | Coulson et al. | 711   | 118      |                               |
| TJC                  | AJ | 2003/0229770 A1 | 12/11/03 | Jeddeloh       | 711   | 213      |                               |
|                      | AK |                 |          |                |       |          |                               |
|                      | AL |                 |          |                |       |          |                               |
|                      | AM |                 |          |                |       |          |                               |
|                      | AN |                 |          |                |       |          |                               |

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## FOREIGN PATENT DOCUMENTS

|  |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION |    |
|--|----|-----------------|------|---------|-------|----------|-------------|----|
|  |    |                 |      |         |       |          | YES         | NO |
|  | AO |                 |      |         |       |          |             |    |
|  | AP |                 |      |         |       |          |             |    |

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

|     |    |  |  |  |  |  |  |  |
|-----|----|--|--|--|--|--|--|--|
| TJC | AQ | Intel, "Intel 840 Chipset: 82840 Memory Controller Hub (MCH)", Datasheet, October 1999, pp. 1-178. |  |  |  |  |  |  |
|     | AR |  |  |  |  |  |  |  |

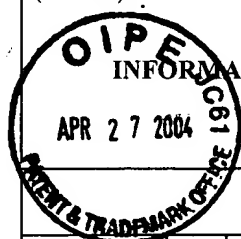
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19-May-2004

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APPLICANT(S)

Trung T. Doan and Dean A. Klein

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|----------------------|----|-----------------|----------|----------------|-------|----------|-------------------------------|
| TX                   | AA | 6,462,978 B2    | 10/08/02 | Shibata et al. | 365   | 63       |                               |
|                      | AB |                 |          |                |       |          |                               |
|                      | AC |                 |          |                |       |          |                               |
|                      | AD |                 |          |                |       |          |                               |
|                      | AE |                 |          |                |       |          |                               |
|                      | AF |                 |          |                |       |          |                               |
|                      | AG |                 |          |                |       |          |                               |
|                      | AH |                 |          |                |       |          |                               |
|                      | AI |                 |          |                |       |          |                               |
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|  |    |                 |      |         |       |          | YES         | NO |
|  | AK |                 |      |         |       |          |             |    |
|  | AL |                 |      |         |       |          |             |    |
|  | AM |                 |      |         |       |          |             |    |
|  | AN |                 |      |         |       |          |             |    |
|  | AO |                 |      |         |       |          |             |    |

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

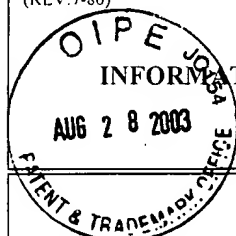
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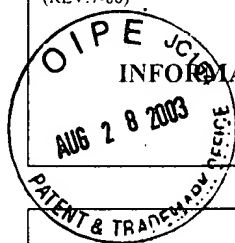
| *EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE     | NAME               | CLASS | SUBCLASS | FILING DATE<br>IF APPROPRIATE |
|----------------------|----|-----------------|----------|--------------------|-------|----------|-------------------------------|
| TJC                  | AA | 5,251,303       | 10/05/93 | Fogg, Jr. et al.   | 395   | 275      |                               |
| TJC                  | AB | 5,432,907       | 07/11/95 | Picazo, Jr. et al. | 395   | 200      |                               |
| TJC                  | AC | 5,497,476       | 03/05/96 | Oldfield et al.    | 395   | 439      |                               |
| TJC                  | AD | 5,659,798       | 08/19/97 | Blumrich et al.    | 395   | 846      |                               |
| TJC                  | AE | 6,061,263       | 05/09/00 | Boaz et al.        | 365   | 51       |                               |
| TJC                  | AF | 6,073,190       | 06/06/00 | Rooney             | 710   | 56       |                               |
| TJC                  | AG | 6,105,075       | 08/15/00 | Ghaffari           | 710   | 5        |                               |
| TJC                  | AH | 6,137,709       | 10/24/00 | Boaz et al.        | 365   | 51       |                               |
| TJC                  | AI | 6,167,465       | 12/26/00 | Parvin et al.      | 710   | 22       |                               |
|                      | AJ | 6,233,376 B1    | 05/15/01 | Updegrove          | 385   | 14       |                               |
| TJC                  | AK | 6,243,769 B1    | 06/05/01 | Rooney             | 710   | 56       |                               |
| TJC                  | AL | 6,285,349 B1    | 09/04/01 | Smith              | 345   | 147      |                               |
| TJC                  | AM | 6,349,363 B2    | 02/19/02 | Cai et al.         | 711   | 129      |                               |
| TJC                  | AN | 6,356,573 B1    | 03/12/02 | Jonsson et al.     | 372   | 46       |                               |
| TJC                  | AO | 6,367,074 B1    | 04/02/02 | Bates et al.       | 717   | 11       |                               |
| TJC                  | AP | 6,421,744 B1    | 07/16/02 | Morrison et al.    | 710   | 22       |                               |
| TJC                  | AQ | 6,434,639 B1    | 08/13/02 | Haghighi           | 710   | 39       |                               |
| TJC                  | AR | 6,463,059 B1    | 10/08/02 | Movshovich et al.  | 370   | 389      |                               |
| TJC                  | AS | 6,470,422 B2    | 10/22/02 | Cai et al.         | 711   | 129      |                               |
| TJC                  | AT | 6,477,614 B1    | 11/05/02 | Leddige et al.     | 711   | 5        |                               |
| TJC                  | AU | 6,496,909 B1    | 12/17/02 | Schimmel           | 711   | 163      |                               |
| TJC                  | AV | 6,539,490 B1    | 03/25/03 | Forbes et al.      | 713   | 401      |                               |
| TJC                  | AW | 6,552,564 B1    | 04/22/03 | Forbes et al.      | 326   | 30       |                               |
| TJC                  | AX | 6,587,912 B2    | 07/01/03 | Leddige et al.     | 711   | 5        |                               |
| TJC                  | AY | 2002/0112119 A1 | 08/15/02 | Halbert et al.     | 711   | 115      |                               |

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## INFORMATION DISCLOSURE STATEMENT

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APPLICANT(S)

Trung T. Doan and Dean A. Klein

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## FOREIGN PATENT DOCUMENTS

|  |    | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION |    |
|--|----|-----------------|------|---------|-------|----------|-------------|----|
|  |    |                 |      |         |       |          | YES         | NO |
|  | AZ |                 |      |         |       |          |             |    |
|  | BA |                 |      |         |       |          |             |    |
|  | BB |                 |      |         |       |          |             |    |

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

|     |    |   |  |  |  |  |  |  |
|-----|----|---|--|--|--|--|--|--|
| TSC | BC | Micron Technology, Inc., "Synchronous DRAM Module 512MB/1GB (x72, ECC) 168-PIN Registered FBGA SDRAM DIMM, Micron Technology, Inc., 2002, pp. 1-23. |  |  |  |  |  |  |
|     | BD |   |  |  |  |  |  |  |
|     | BE |   |  |  |  |  |  |  |

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|----------------------|----|-----------------|----------|-----------------|-------|----------|-------------------------------|
| TJC                  | AA | 5,442,770       | 08/15/95 | Barratt         | 395   | 403      |                               |
| TJC                  | AB | 6,144,587       | 11/07/00 | Yoshida         | 365   | 189.05   |                               |
| TJC                  | AC | 6,167,486       | 12/26/00 | Lee et al.      | 711   | 120      |                               |
| TJC                  | AD | 6,201,724 B1    | 03/13/01 | Ishizaki et al. | 365   | 49       |                               |
| TJC                  | AE | 6,327,642 B1    | 12/04/01 | Lee et al.      | 711   | 120      |                               |
| TJC                  | AF | 6,330,205 B2    | 12/11/01 | Shimizu et al.  | 365   | 230.06   |                               |
| TJC                  | AG | 6,347,055 B1    | 02/12/02 | Motomura        | 365   | 189.05   |                               |
| TJC                  | AH | 6,373,777 B1    | 04/16/02 | Suzuki          | 365   | 230.03   |                               |
| TJC                  | AI | 6,381,190 B1    | 04/30/02 | Shinkai         | 365   | 230.03   |                               |
| TJC                  | AJ | 6,473,828 B1    | 10/29/02 | Matsui          | 711   | 104      |                               |
| TJC                  | AL | 6,477,621 B1    | 11/05/02 | Lee et al.      | 711   | 120      |                               |
| TJC                  | AM | 6,505,287 B2    | 01/07/03 | Uematsu         | 711   | 170      |                               |

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|  | AQ |                 |      |         |       |          |             |    |
|  | AR |                 |      |         |       |          |             |    |
|  | AS |                 |      |         |       |          |             |    |

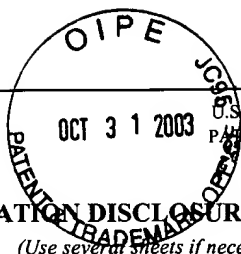
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|----------------------|----|-----------------|----------|---------------|-------|----------|-------------------------------|
| TJC                  | AA | 5,875,352       | 02/23/99 | Gentry et al. | 395   | 843      |                               |
| TJC                  | AB | 6,301,637 B1    | 10/09/01 | Krull et al.  | 711   | 112      |                               |
| TJC                  | AC | 6,594,713 B1    | 07/15/03 | Fuoco et al.  | 710   | 31       |                               |
| TJC                  | AD | 2003/0043426 A1 | 03/06/03 | Baker et al.  | 359   | 109      |                               |
|                      | AE |                 |          |               |       |          |                               |
|                      | AF |                 |          |               |       |          |                               |
|                      | AG |                 |          |               |       |          |                               |
|                      | AH |                 |          |               |       |          |                               |
|                      | AI |                 |          |               |       |          |                               |
|                      | AJ |                 |          |               |       |          |                               |
|                      | AK |                 |          |               |       |          |                               |
|                      | AL |                 |          |               |       |          |                               |
|                      | AM |                 |          |               |       |          |                               |
|                      | AN |                 |          |               |       |          |                               |
|                      | AO |                 |          |               |       |          |                               |
|                      | AP |                 |          |               |       |          |                               |
|                      | AQ |                 |          |               |       |          |                               |
|                      | AR |                 |          |               |       |          |                               |
|                      | AS |                 |          |               |       |          |                               |
|                      | AT |                 |          |               |       |          |                               |
|                      | AU |                 |          |               |       |          |                               |
|                      | AV |                 |          |               |       |          |                               |
|                      | AW |                 |          |               |       |          |                               |
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|----------------------|----|-----------------|----------|-----------------|-------|----------|-------------------------------|
| TJE                  | AA | 6,067,262       | 05/23/00 | Irrinki et al.  | 365   | 201      |                               |
| TJC                  | AB | 6,246,618 B1    | 06/12/01 | Yamamoto et al. | 365   | 200      |                               |
| TJC                  | AC | 6,590,816 B2    | 07/08/03 | Perner          | 365   | 200      |                               |
|                      | AD |                 |          |                 |       |          |                               |
|                      | AE |                 |          |                 |       |          |                               |
|                      | AF |                 |          |                 |       |          |                               |
|                      | AG |                 |          |                 |       |          |                               |
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|  |    |                 |      |         |       |          | YES         | NO |
|  | AK |                 |      |         |       |          |             |    |
|  | AL |                 |      |         |       |          |             |    |
|  | AM |                 |      |         |       |          |             |    |
|  | AN |                 |      |         |       |          |             |    |
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